### Michigan Quality Improvement Consortium

**TREATMENT OF ATTENTION-DEFICIT/HYPERACTIVITY DISORDER (ADHD) FOR CHILDREN AND ADOLESCENTS**

The following guideline recommends treatment procedures for attention-deficit/hyperactivity disorder.

<table>
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<th>Eligible Population</th>
<th>Key Components</th>
<th>Recommendation and Level of Evidence</th>
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| Children and adolescents with a confirmed diagnosis of ADHD | Age-specific general recommendations | ADHD is a chronic condition, and therefore, its management should follow the principles of the chronic care model and medical home. [B]  
- Treatment includes addressing co-morbid conditions, including substance use. [B] Consider referral to a specialist.  
**Recommendations vary by age:**  
**Age < 4 years old, refer to a specialist.**  
**4-5 years old:** Make sure diagnosis is correct and co-morbid diagnoses considered. Preferred treatment: evidence-based parent- and/or teacher-administered behavior therapy. [A] Medication should only be prescribed if moderate to severe symptoms persist or if behavior interventions are not available and harm of not prescribing outweighs the risks of starting medication at an early age. [B]  
**6-11 years old:** First line treatment: FDA-approved medication for ADHD [A] and/or parent- and/or teacher-administered behavior therapy, preferably both. [B]  
**12-18 years old:** First line treatment: FDA-approved medication for ADHD [A] and/or behavior therapy [C], preferably both. Educate patient and parents about supervision of proper medication use and risks of misuse, diversion and abuse. |
| Non-pharmacological treatment and education | Behavior therapy [A] | Co-interventions which could ameliorate psychosocial, family or academic co-morbidities of ADHD: family and patient education\(^1\) including environmental modifications, negative impact of excessive electronic media and poor sleep hygiene; training in anger management and impulse control; cognitive training; school programming and supports; support groups and organizations, i.e. Children and Adults with Attention-Deficit/Hyperactivity Disorder (CHADD) |
| Pharmacotherapy | Combination of drug and behavioral therapy may improve targeted behaviors at lower drug doses.  
For patients in whom pharmacotherapy is indicated, consider trial of psychostimulants starting with a low dose of a preparation with a short half-life and increasing weekly or biweekly. [B] Titrate to clinical improvement or stabilization at the lowest dose necessary.  
Follow-up with the prescriber within 2-4 weeks after starting a psychostimulant and at least two more times within the first 9 months of treatment. Monitor symptom reduction and functional improvement; monitor for side effects, including but not limited to: weight loss, growth deceleration, adverse cardiovascular effects, insomnia, depression, psychosis, or tics.  
After effective dose is known, transition to a longer-acting agent may occur if desired. Response to one psychostimulant does not predict response to another. [A] For patients who do not have desired response after adequate trial or have significant side effects, evaluate adherence, consider second-line non-stimulant medications, reconsider diagnosis and co-morbid conditions or refer to specialist.  
If suspicious of misuse and/or diversion, consider obtaining a MAPS\(^2\) report or urine drug screen. |

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\(^1\)The American Academy of Pediatrics recommends using its ADHD toolkit and stocking the office with questionnaires, diagnostic checklists and patient education materials  
\(^2\)Michigan Automated Prescription System (MAPS)  

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Levels of evidence for the most significant recommendations: **A** – randomized controlled trials; **B** – controlled trials, no randomization; **C** – observational studies; **D** – opinion of expert panel  
This guideline lists core management steps. It is based on The American Academy of Pediatrics ADHD: Clinical Practice Guideline for the Diagnosis, Evaluation and Treatment of Attention-Deficit/Hyperactivity Disorder in Children and Adolescents, Subcommittee on Attention-Deficit/Hyperactivity Disorder, Steering Committee on Quality Improvement and Management; Pediatrics 2011;128;1007. Individual patient considerations and advances in medical science may supersede or modify these recommendations.

Approved by MQIC Medical Directors March 2015, 2017, 2019